## WHAT IS CLAIMED IS:

[c1] A method for determining relative concentrations of two or more components in a sample comprising using NMR integration values of resonance packets to determine the relative concentrations of two or more components in a sample.

[c2] The method of claim 1, wherein said resonance packets comprise one resonance.

[c3] The method of claim 1, wherein at least one resonance packet comprises more than one resonance.

[c4] A method for determining the relative concentrations of two or more components in a sample comprising:
obtaining a nuclear magnetic resonance spectrum of the sample;
identifying resonance packets from the spectrum;
integrating said resonance packets;
identifying the number of nuclei that contribute to the integral data of said resonance packets; and
determining the relative concentration of each component in said sample based on the integral data and on the number of nuclei.

[c5] The method of claim 4, wherein said resonance packets comprise one resonance.

[c6] The method of claim 4, wherein at least one resonance packet comprises more than one resonance.

[c7] The method of claim 4, wherein the steps are carried out in the recited order.

[c8] The method of claim 4, wherein said nuclei is selected from the group consisting of $^{1}H$, $^{13}C$, $^{15}N$, $^{19}F$, $^{29}Si$, $^{31}P$, $^{11}B$, $^{17}O$, $^{23}Na$, $^{27}Al$ and $^{29}Si$.

[c9] The method of claim 8, wherein said nuclei is selected from the group consisting of $^{1}H$ and $^{13}C$.

[c10] The method of claim 4, wherein said determination of the concentration of each

component in said sample is performed by linear regression analysis.

[c11] The method of claim 4, wherein the sample comprises a polymer or mixture of polymers.

[c12] The method of claim 11, wherein said polymer or mixture of polymers comprises a soft segment BPA polycarbonate.

[c13] The method of claim 11, wherein said polymer or mixture of polymers comprises a protein, polypeptide or peptide.

[c14] The method of claim 4, wherein said sample is in solution.

[c15] The method of claim 4, wherein said sample is in the solid state.

[c16] The method of claim 4, wherein said method is implemented in a quality assurance process.

[c17] A method for determining the relative concentrations of two or more components in a sample comprising:
obtaining a nuclear magnetic resonance spectrum of the sample, wherein said sample comprises a polymer or a mixture of polymers;
identifying resonance packets from the spectrum;
integrating said resonance packets;
identifying the number of nuclei that contribute to the integral data of said resonance packets, wherein said nuclei are $^{1}H$ or $^{13}C$; and
determining the relative concentration of each component in said sample based on the integral data and on the number of nuclei.

[c18] The method of claim 17, wherein said sample is in solution.

[c19] The method of claim 17, wherein said sample is in the solid state.

[c20] The method of claim 17, wherein said polymer or mixture of polymers comprises a soft segment BPA polycarbonate.

[c21] The method of claim 17, wherein said polymer or mixture of polymers comprises a protein, polypeptide or peptide.

[c22] The method of claim 17, wherein said method is implemented in a quality assurance process.